

IN THE CLAIMS:

Please substitute the following listing of claims for the previous listing of claims:

1. (Currently amended) An aerosolization apparatus comprising:
a body defining a chamber having an air inlet and an air outlet, wherein the chamber is sized to receive a receptacle having an opening and containing a pharmaceutical formulation in a manner which allows the receptacle to move within the chamber and wherein the air inlet is oriented to cause air to swirl within the chamber;
wherein the chamber comprises a longitudinal axis which is substantially parallel to an inhalation direction and wherein the chamber has a sidewall with a cross-section orthogonal to the longitudinal axis of the chamber that is non-circular and wherein the receptacle contacts the non-circular cross-section of the sidewall when the receptacle moves within the chamber,
whereby when a user inhales, air enters into the chamber through the inlet to cause the receptacle to move within the chamber so that the receptacle is disturbed by the contact with the non-circular cross-section of the sidewall and the pharmaceutical formulation exits through an opening in the receptacle and is aerosolized for delivery to the user through the outlet.
2. (Original) An apparatus according to claim 1 wherein the receptacle is a capsule.
3. (Original) An according to claim 2 wherein the longitudinal axis of the chamber and the longitudinal axis of the capsule form an angle of less than about 45 degrees during use.
4. (Original) An apparatus according to claim 2 wherein the chamber is elongated and wherein the capsule is received lengthwise within the elongated chamber.

5. (Original) An apparatus according to claim 2 wherein the width of the chamber is less than the length of the capsule.

6. (Original) An apparatus according to claim 1 further comprising a puncturing member moveable within the chamber to create the opening in the receptacle.

7. (Original) An apparatus according to claim 6 wherein the puncture member comprises a sharpened tip for penetrating the wall of the receptacle.

8. (Original) An apparatus according to claim 6 wherein the puncture member comprises a pair of sharpened tips for penetrating the wall of the receptacle.

9. (Original) An apparatus according to claim 6 wherein the puncture member is positioned to pierce only one end of the receptacle.

10. (Cancelled).

11. (Original) An apparatus according to claim 1 wherein the non-circular cross-section comprises one or more projections that extend into the chamber.

12. (Original) An apparatus according to claim 1 wherein the non-circular cross-section comprises one or more indentations that extend inwardly into sidewalls of the chamber.

13. (Original) An apparatus according to claim 1 wherein the non-circular cross-section is a polygon.

14. (Original) An apparatus according to claim 1 wherein the non-circular cross-section is oval.

15. (Currently amended) An aerosolization apparatus comprising:
a body defining a chamber having an air inlet and an air outlet, wherein the chamber is sized to receive a receptacle having an opening and containing a pharmaceutical formulation in a manner which allows the receptacle to move within the chamber and wherein the air inlet is oriented to cause air to swirl within the chamber;
wherein the chamber comprises a longitudinal axis which is substantially parallel to an axis passing centrally through the outlet and wherein the chamber has a sidewall with a cross-section orthogonal to the longitudinal axis of the chamber that is non-circular and wherein the receptacle contacts the non-circular cross-section of the sidewall when the receptacle moves within the chamber,
whereby when a user inhales, air enters into the chamber through the inlet to cause the receptacle to move within the chamber so that the receptacle is disturbed by the contact with the non-circular cross-section of the sidewall and the pharmaceutical formulation exits through an opening in the receptacle and is aerosolized for delivery to the user through the outlet.
16. (Original) An apparatus according to claim 15 wherein the receptacle is a capsule.
17. (Original) An according to claim 16 wherein the longitudinal axis of the chamber and the longitudinal axis of the capsule form an angle of less than about 45 degrees during use.
18. (Original) An apparatus according to claim 16 wherein the chamber is elongated and wherein the capsule is received lengthwise within the elongated chamber.
19. (Original) An apparatus according to claim 16 wherein the width of the chamber is less than the length of the capsule.

20. (Original) An apparatus according to claim 15 further comprising a puncturing member moveable within the chamber to create the opening in the receptacle.

21. (Cancelled).

22. (Currently amended) An aerosolization apparatus comprising:
a body defining a chamber having an air inlet and an air outlet, wherein the chamber is sized to receive a receptacle having an opening and containing a pharmaceutical formulation in a manner which allows the receptacle to move within the chamber and wherein the air inlet is oriented to cause air to swirl within the chamber;

wherein the chamber comprises a longitudinal axis which is substantially perpendicular to an inhalation direction and wherein the chamber has a sidewall with a cross-section along a plane parallel to the longitudinal axis of the chamber, the cross-section being non-circular and wherein the receptacle contacts the non-circular cross-section of the sidewall when the receptacle moves within the chamber,

whereby when a user inhales, air enters into the chamber through the inlet to cause the receptacle to move within the chamber so that the receptacle is disturbed by the contact with the non-circular cross-section of the sidewall and the pharmaceutical formulation exits through an opening in the receptacle and is aerosolized for delivery to the user through the outlet.

23. (Original) An apparatus according to claim 22 wherein the receptacle is a capsule.

24. (Original) An apparatus according to claim 22 further comprising a puncturing member moveable within the chamber to create the opening in the receptacle.

25. (Cancelled).

26. (Currently amended) A method of aerosolizing a pharmaceutical formulation, the method comprising:
- providing a receptacle containing a pharmaceutical formulation;
 - inserting the receptacle into a chamber having a non-circular cross section, wherein the receptacle has an opening; and
 - inhaling through an opening in the housing to cause air to flow into the chamber thereby causing the receptacle to move about the non-circular cross section to aerosolize the pharmaceutical formulation.
27. (Original) A method according to claim 26 wherein the receptacle is a capsule.
28. (Original) A method according to claim 27 wherein the chamber is elongated and wherein the capsule is inserted lengthwise into the elongated chamber.
29. (Previously presented) An apparatus according to claim 15 wherein the non-circular cross-section comprises one or more projections that extend into the chamber.
30. (Previously presented) An apparatus according to claim 15 wherein the non-circular cross-section comprises one or more indentations that extend inwardly into sidewalls of the chamber.
31. (Previously presented) An apparatus according to claim 15 wherein the non-circular cross-section is a polygon.
32. (Previously presented) An apparatus according to claim 15 wherein the non-circular cross-section is oval.

33. (Previously presented) An apparatus according to claim 22 wherein the non-circular cross-section comprises one or more projections that extend into the chamber.

34. (Previously presented) An apparatus according to claim 22 wherein the non-circular cross-section comprises one or more indentations that extend inwardly into sidewalls of the chamber.

35. (Previously presented) An apparatus according to claim 22 wherein the non-circular cross-section is a polygon.

36. (Previously presented) An apparatus according to claim 22 wherein the non-circular cross-section is oval.

37. (Previously presented) A method according to claim 26 wherein the non-circular cross-section comprises one or more projections that extend into the chamber.

38. (Previously presented) A method according to claim 26 wherein the non-circular cross-section comprises one or more indentations that extend inwardly into sidewalls of the chamber.

39. (Previously presented) A method according to claim 26 wherein the non-circular cross-section is a polygon.

40. (Previously presented) A method according to claim 26 wherein the non-circular cross-section is oval.

41. (Previously presented) An apparatus according to claim 20 wherein the puncture member comprises a pair of sharpened tips for penetrating the wall of the receptacle.

42. (Previously presented) An apparatus according to claim 20 wherein the puncture member is positioned to pierce only one end of the receptacle.

43. (Previously presented) An apparatus according to claim 24 wherein the puncture member comprises a pair of sharpened tips for penetrating the wall of the receptacle.

44. (Previously presented) An apparatus according to claim 24 wherein the puncture member is positioned to pierce only one end of the receptacle.

45. (Previously presented) A method according to claim 26 further comprising puncturing the receptacle to create an opening in the receptacle when the receptacle is in the chamber.

46. (Previously presented) A method according to claim 45 wherein the step of puncturing comprises creating two openings in the receptacle.

47. (Previously presented) A method according to claim 45 the step of puncturing comprises creating one or more openings on only one end of the receptacle.